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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/451,090	11/30/1999	RAVI SANDHU	GMU-16U	8582

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GEORGE MASON UNIVERSITY  
OFFICE OF TECHNOLOGY TRANSFER, MSN 5G5  
4400 UNIVERSITY DRIVE  
FAIRFAX, VA 22030

EXAMINER

DINH, KHANH Q

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 05/28/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/451,090	SANDHU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Khanh Dinh	2155	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 May 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 79-117 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 79-117 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Transitional After Final Practice***

1. Since this application is eligible for the transitional procedure of 37 CFR 1.129(a), and the fee set forth in 37 CFR 1.17(r) has been timely paid, the finality of the previous Office action is hereby withdrawn pursuant to 37 CFR 1.129(a). Applicant's Request For Consideration submission after final filed on 5/1/2003 (paper # 12) has been entered. Claims 79-117 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 79-82, 97-100, 113, 116 and 117 are rejected under 35 U.S.C. 102(e) as being anticipated by Angles et al. US pat. No.5,933,811.

As to claim 79, Angles discloses a system for transfer of secure data on a network (internet) comprising:

a) a client (12 fig.4) capable of presenting conforming client data.

b) a server (server 14 fig.4) capable of using said conforming client data to create at least one secure cookie (i.e., processing data upon receiving request from a client and creating a cookie, see figs.2, 4, 1, abstract, col.9 lines 4-55 and col.10 line 20 to col.11 line 26), each of said at least one secure cookie including:

i) a domain field capable of holding domain data to associate said secure cookie to a domain where said secure cookie is valid (i.e., containing a domain name or the requester, see col.11 lines 5-65).

ii) at least one name field capable of holding name data (see col.11 lines 5-65).

iii) at least one value field capable of holding value data derived from said conforming client data (see fig.4, col.11 lines 5-65).

iv) an expiration field capable of holding cookie expiration data (EXPIRE field, col.11 lines 5-65).

c) a network (20 fig.4) capable of transporting at least one of said at least one secure cookie between said server and said client (see fig.4, col.12 line 13 to col.13 line 60).

d) a client storage (44 fig.4) means capable of storing at least one of said at least one secure cookie and a secure attribute service between said client and said server using said at least one of said at least one secure cookie (see col.10 line 20 to col.11 line 65 and col.13 line 21 to col.14 line 67).

As to claims 80 and 81, Angles disclose a web browser (40 fig.4) and at least one of said at least one secure cookie is an authentication cookie (see col.10 line 20 to col.11 line 65).

As to claim 82, Angles discloses the secure attribute service including said server authenticating said client by comparing said conforming client data to said value data (using consumer member code to identify each consumer, see col.10 line 20 to col.11 line 65).

As to claim 97, 98 and 116, Angles discloses that at least one of said at least one secure cookie is used in an electronic transaction and a part of a role based access control system and at least one of said at least one secure cookie is used in assigning client roles (see col.11 line 5 to col.12 line 60).

As to claim 99, Angles discloses a method for the transfer of secure data on a network including the steps of:

a client (12 fig.4) making a request from a server (14 fig.4) and said server retrieving conforming client data (see col.10 lines 20-59).

said server creating at least one secure cookie, each of said at least one secure cookie including selected conforming client data, said selected conforming data including at least some of said conforming client data (i.e., processing data upon receiving request from a client and creating a cookie, see figs.2, 4, 1, abstract, col.9 lines 4-55 and col.10 line 20 to col.11 line 26)).

said server transmitting at least one of said at least one secure cookie to said client and said client storing at least one of said at least one secure cookie (see col.11 line 27 to col.12 line 60).

said client presenting to a related server at least one of said stored at least one secure cookie with a second request, said related server residing on the same domain as said server (i.e., (i.e., request containing a domain name or the requester, see col.11 lines 5-65).

said related server making a determination of whether at least one of said at least one retrieved stored at least one secure cookie contains said selected conforming client data and said related server fulfilling said second request if said determination is positive (see col.10 line 20 to col.11 line 65 and col.13 line 21 to col.14 line 67).

As to claim 100, Angles discloses said conforming client data in retrieved from said client (see col.11 lines 5-65 and col.10 line 20 to col.11 line 65).

As to claim 113, Angles discloses determination is positive only if said selected conforming client data was retrieved by said server from said client during the current session (see col.11 lines 5-65 and col.10 line 20 to col.11 line 65).

As to claim 117, Angles discloses a request is part of an attribute-based access control function session (see col.11 lines 5-65 and col.10 line 20 to col.11 line 65).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

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matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patent ability shall not be negative by the manner in which the invention was made.

3. Claims 83-88, 90- 96, 101, 102, 104-108, 109-111 and 114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angles et al. US pat. No.5,933,811 in view of Wiser et al US pat. No.6,385,596.

As to claims 83-88, 96, 101, 102, 104, 108, 111 and 114, Angles's teachings still applied as in item 2 above. Angles does not specifically disclose the client's IP address, a hashing algorithm, an encryption algorithm, the authentication cookie is a password cookie and said conforming client data includes a password, a digital signature on a timestamp, secret-key based authentication service and an encryption session key. However, Wiser discloses the client's IP address, a hashing algorithm, an encryption algorithm, the authentication cookie is a password cookie and said conforming client data including a password, secret-key based authentication service and an encryption session key (i.e., using multiple levels of encryptions such as Password Authentication Protocol, see abstract, col.10 line 13 to col.12 line 54 and col.16 line 4 to col.19 line 59 and col.20 line 10 to col.21 line 61). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Wiser's teachings into the computer system of Angles to identify a host computer because it would have enabled users to identify a host connected to the Internet to other Internet hosts and provided more secure delivery of data over the Internet.

As to claims 90 and 91, Angles discloses at least one secure cookie includes a multitude of secure cookies and a seal cookie capable of being used by said server to determine if another

cookie in said multitude of secure cookies has been altered (see col.11 line 5 to col.12 line 60 and col.17 line 10 to col.18 line 34).

As to claims 92, 93 and 109, Angles discloses that the seal cookie includes an integrity check value and the signature of a message digest signed using a private key (see col.11 line 5 to col.12 line 60 and col.17 line 10 to col.18 line 34).

As to claims 94 and 95, Angles discloses at least one of said at least one name field and at least one of said at least one value field are a pair, and one secure cookie further includes a flag, said flag specifying whether all machines within said domain referenced by said domain data can access said value data (i.e., NAME and VALUE pair, col.11 lines 5-65).

As to claims 105 –107 and 110, Wiser discloses determination further includes verifying that digital signature belongs to said client and including the step of said server encrypting at least some of said selected conforming client data, a public key and a secret key (see col.10 line to col.12 line 54 and col.16 line 4 to col.19 line 59). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Wiser's teachings into the computer system of Rangarajan to identify a host computer because it would have enabled users to identify a host connected to the Internet to other Internet hosts and provided more secure delivery of data over the Internet.



5. Claims 89, 103, 112 and 115 are rejected under 35 U.S.C. 103(a) as being unpatentable Angles and Weiser as in item 4 above and further in view of Klingman US pat. No.5,729,594.

Angles and Wiser's teachings still applied as in item 4 above. Neither Angles nor Wiser specifically discloses a KT cookie and a Kerberos ticket. However, the use of a KT cookie and Kerberos ticket using a Kerberos protocol in cryptography is generally well known in the art as disclosed by Klingman (see col.3 lines 6-59). It would have been obvious if not inherent to one of the ordinary skill in the art at the time the invention was made to utilize such well known feature in the computer network of Angles to support secure online transactions because it would have allowed registered users to write electronic checks to other users securely (see Klingman's col.3 lines 560).

***Other prior art cited***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Bryant et al., US pat. No.6,411,998.

***Response to Arguments***

4. Applicant's arguments with respect to claims 79-117 (paper # 12, filed on 5/1/2003) have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Claims 79-117 are ***rejected***.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is 703-308-8528. The examiner can normally be reached on 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9468. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-5510 for regular communications and 703-746-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.


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Khanh Dinh  
Examiner  
Art Unit 2155

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May 22, 2003

  
AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100